Ultra-Short Arcs for Highly Efficient Electric Hydrolysis with Rotating Metallic Dendrites and Arc-Focal Control System

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Introduction

Although this author strongly believes that the use of narrowly-spaced alternating Coulomb Force Line generators provides an ideal pathway to efficient hydrolysis, as this technology remains theoretical, it may be useful to explore other avenues including the enhancement of traditional electrical hydrolysis through non-conventional implementations of the technology.

Abstract

A metallic, dandelion-like structure consisting of a large number of nano-dendrites may be used to efficiently carry out the task of hydrolysis. Whereas conventional electrical hydrolysis entails the generation of electrical arcs over substantial range (leading to cathode wear and wasted energy,) the following approach is advantageous in much the same way in which it is advantageous to deliver electricity to your home by wire rather than wirelessly.

Each metallic nano-dendrite would be capable of bonding chemically with hydrogen, but not with oxygen. Each dendrite would bind to a single water molecule on this basis. A great many water molecules would bond with the metal at each of myriad points.

After a water molecule has bonded with a metallic dendrite by way of one of its hydrogens, an electrical impulse is delivered through the wire (dendrite) at a certain voltage. A certain degree of magnetism is conveyed through the dendrite complex by way of a connected electromagnet. By adjusting the strength of the magnetic field, the focal point of a nano-arc generated by the dendrites can be precisely controlled.

If electricity can be made to essentially wrap around the bonded hydrogen and to flow through the space between the hydrogen and the oxygen, separation will occur. The hydrogen, for its part, will remain bonded to the dendrite and would need to be separated from the dendrite to complete the process.

By stepping up the magnetic field but keeping the voltage the same, electricity can be made to accumulate at a nearer focal point, sc. between the tip of the dendrite and the hydrogen, prompting the detachment of the hydrogen atom; liberating it for subsequent collection.

Conclusion

Thus, a pulse generated with X level of magnetism will produce a hydrolysis event and a pulse generated with a Y level of magnetism will “shake loose” the hydrogen from its chemical bond with the dendrite. Although two distinct chemical separations are being made, the amount of energy required to

achieve this is trivial. The ability to rapidly alternate the power of the magnetic field as well as the applied voltage could, when coupled with the application of physical rotation by nano-motor to the “dandelions” would allow for large quantities of hydrogen to be produced at a relatively fast pace with little cathode wear and little energy.